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| APPLICATION NO. | ŀ | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------|------|-------------|-------------------------|---------------------|------------------|
| (9.807,055 07.09/2001 | | 07/09/2001 | Olaf Kunz | 10191/1735 2184 | 2184 |
| 2nt 46 | 7590 | 01-15/2003 | | | |
| KENYON | | /ON | EXAMINER | | |
| ONE BROA NEW YOR | | 0004 | | LEYKIN, RITA | |
| | | | | ART UNIT | PAPER NUMBER |
| | | | | 2837 | |
| | | | DATE MAILED: 01/15/2003 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | | | | |
|---|---|--|---|------------------------|--|--|--|--|--|
| | · | 09/807,055 | KUNZ ET AL. | | | | | | |
| | Office Action Summary | Examiner | Art Unit | | | | | | |
| | | Rita Leykin | 2837 | | | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address | | | | | | | | | |
| Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM | | | | | | | | | |
| THE I - Exter after - If the - If NC - Failu - Any r | MAILING DATE OF THIS COMMUNICATION nsions of time may be available under the provisions of 37 CFR 3 (SIX (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) days, a repend for reply is specified above, the maximum statutory perion reply within the set or extended period for reply will, by statication period by the Office later than three months after the mailed patent term adjustment. See 37 CFR 1.704(b). | I. 1.136(a). In no event, however, epply within the statutory minimus bd will apply and will expire SIX ute, cause the application to be | may a reply be timely filed m of thirty (30) days will be considered time (6) MONTHS from the mailing date of this come ABANDONED (35 U.S.C. § 133). | aly. communication. | | | | | |
| 1) | Responsive to communication(s) filed on | | | | | | | | |
| 2a)[| | ——· This action is non-final | | | | | | | |
| 3) | , — | | | he merits is | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | | | |
| Disposition of Claims | | | | | | | | | |
| • | 4) Claim(s) 1-28 is/are pending in the application. | | | | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | | |
| · | 5) Claim(s) is/are allowed. | | | | | | | | |
| • | ☑ Claim(s) <u>1-28</u> is/are rejected. ☑ Claim(s) is/are objected to. | | | | | | | | |
| • | Claim(s) are subject to restriction and | /or election requireme | ent. | | | | | | |
| | ion Papers | , 01 0100.1011 1040.11011 | | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | | | | |
| 10) | The drawing(s) filed on is/are: a)☐ acc | cepted or b) objected | to by the Examiner. | | | | | | |
| | Applicant may not request that any objection to | the drawing(s) be held in | n abeyance. See 37 CFR 1.85(a) | | | | | | |
| 11) | The proposed drawing correction filed on | is: a) approved I | o) disapproved by the Exami | ner. | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | | | | |
| a)⊠ Ail b) Some * c) None of: | | | | | | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | | | | |
| | 2. Certified copies of the priority documents have been received in Application No | | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | | | | |
| Attachment(s) | | | | | | | | | |
| 2) Notice | te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s | 5) 🔲 No | terview Summary (PTO-413) Paper Notice of Informal Patent Application (Pher: | | | | | | |

Application/Control Number: 09/807,055

Art Unit: 2837

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 15-21 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Nashiki US # 5,469,215.

Nashiki teaches that current and voltage applied to the electric motor can be compensated depending on changes in the rotational speed, position and torque of the electric motor, (see column 4, lines 9-13)

In Nashiki a control system comprises a position sensor 8 for sensing the rotational position of 3-phase synchronous motor 7. The position sensor 8 is connected to a speed sensor 5 for sensing a rotational speed based on rotor position and a current command value setting means 13. The speed sensor is connected to a subtracter 1 for subtracting the detected rotational speed from a speed command to determine speed error.

The subtracter 1 is connected to PID compensator 2 for compensating the speed error and to output a torque command value.

The current command value setting means 13 is connected to the memory 61 being compensation storage means for storing torque error compensation data

Application/Control Number: 09/807,055

Art Unit: 2837

corresponding to the torque, rotational speed, position, and further to a power amplifier 4 for supplying 3-phase currents that are corresponding to the motor current commands.

As it shown in a block diagram of Fig. 5 Nashiki teaches an adder 12 operative as a motor current preparing means, for preparing motor current amplitude based on torque command and also on torque error compensating data, read out from the memory 61.

The error compensation data stored in memory 61 depends on motor three parameters as shown in Fig. 6, (see column 5, lines 1-56, column 5, lines 16-67).

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 22-24 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nashiki US # 5,469,215.

In Nashiki discussion of Fig.9-11 is related to claimed structure and limitations of the above claims. Nashiki teaching can be applied to a control system for a 3-phase ac motor performing two-to-three phase conversion and further to any other control system

for multi-phase, multi-pole motors, dc motors and induction motors, (see column 7, lines 11-67, column 8 – column 9)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita Leykin whose telephone number is (703)308-5828. The examiner can normally be reached on Monday-Friday 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Nappi can be reached on (703)308-3370.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Rita Leykin Examiner

Art Unit 2837

R.L. January 10, 2003